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IN THE

Supreme Court of the United States

OCTOBER TERM, 1975.

No. 75-1744

E-T INDUSTRIES, INC.,

Petitioner,

vs.

WHITTAKER CORP. AND DES PLAINES GRAND AUTOMOTIVE SPEED CENTER, INC.,

Respondents.

PETITIONER'S REPLY BRIEF.

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IN THE

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Respondents.

PETITIONER'S REPLY BRIEF.

ARGUMENT.

I. THE PRESUMPTION OF PATENT VALIDITY SHOULD BE STRENGTHENED WHEN THE PRIOR ART RELIED UPON HAS BEEN FULLY CONSIDERED BY THE PATENT OFFICE AND THE TRIAL COURT AND NO REFERENCES MORE PERTINENT HAVE BEEN ADVANCED.

Respondents have failed to address themselves to a most basic legal and logical consideration raised by Respondents' characterization of the *Adair* and *Siler* prior art references: Respondents could produce *no* prior art reference more pertinent than the File Wrapper references cited and considered by the Patent Office during prosecution of the *Beith* Patent and have thus failed to overcome the statutory presumption of validity extant under 35 U. S. C. § 282. Having thus failed, Respondents urge that, contrary to the findings of the Patent Office and the Trial

Judge, *Siler* and *Adair,* when taken together, teach the Beith invention. In so doing, Respondents have chosen to treat the Beith invention as a combination of old elements, whereas the Patent Office and the Trial Court more correctly determined that *Beith* included novel elements not taught in *Adair, Siler* or any combination thereof.

Respondents have instead attempted to use the Fujii Wheel and the Ostgaard drawings to show that Ansen had experimented along the same lines as Beith to solve the same problems, and that such experimentation made Beith's solution an obvious one. A review of the Trial Judge's Findings of Fact, particularly Findings 14 through 20, plainly demonstrates that the Trial Judge, after having had the opportunity to observe Respondents' witnesses and hear their testimony, specifically found that the testimony elicited was ". . . unreliable in view of many inconsistent and impeaching statements made under oath. . . . The testimony *and wheel* do not fulfill the defendant's required burden of establishing clear and convincing invalidating evidence". (Emphasis ours.) In point of fact, the alleged Fujii Wheel was admitted at trial as *demonstrative* evidence, and the Trial Judge reserved ruling as to the very existence of the wheel at the times and places claimed by Respondents. That the Trial Court's findings on the facts *do not* support the existence of the Fujii Wheel is clear in Finding of Fact 17 wherein the Trial Court stated:

> "In addition to the fact that testing of the alleged wheel was never completed, I find no evidence that could serve as a basis for concluding that the Fujii Wheel, *if it did exist at the time claimed,* was anything other than a concealed or abandoned model that never was publicly disclosed." (Emphasis ours.)

Even if we assumed *arguendo* the existence of the Fujii Wheel as claimed by Respondents, the fact remains that Respondents did not begin manufacturing a wheel utilizing reorientable inserts until more than five years after the alleged experimentation with

the Fujii Wheel. During that five year period, Respondents concentrated on a wheel system clearly commercially inferior to that developed by Beith and it was not until the Beith device earned commercial success that Respondents chose to abandon their large adaptor plate system and opt in favor of infringing the *Beith* patent.

If it is true, as Respondents state, that the Ostgaard drawings speak for themselves, it is equally true that Ostgaard's testimony tells us that he drew a *retainer plate* ,rather than a wheel. Respondents contend that Ostgaard sketched a wheel similar to that of Beith, then subsequently erased the drawing. In fact, Ostgaard knew *nothing* about the Fujii Wheel or the Beith Wheel, and was first shown the Fujii Wheel at a deposition held many years later, in connection with this lawsuit. Ostgaard testified that the erasures on the drawing represented his attempt to develop ". . . a novelty of a *retainer plate* for holding wheels in place . . .".[1] (Emphasis ours.) Thus, Ostgaard himself characterized his drawing as one for a "retainer plate," *not* a universal wheel as taught by Beith. If anything, Ostgaard by his own admission was concentrating on a solution similar to that adopted unsuccessfully by Respondents: use of a large adaptor plate mounted at the rear of the wheel.

II. INTER-CIRCUIT CONFLICT AS TO THE EXTENT OF APPELLATE REVIEW OF NON-OBVIOUSNESS IS REAL.

A review of the cases and authorities cited by Petitioner clearly identifies the conflict in question; Respondents tacitly admit to the conflict by ignoring Petitioner's brief, offering no rebuttal to the cases and analyses set forth by Petitioner. It is now certain that the standard of appellate review utilized by the Appeals Court not only is inconsistent with the standard adopted by Appeals Courts in other circuits, but is inconsistent within its own circuit as well. In a recently decided case entitled *Ortho*

1. Trial Record at pp. 565, 568, and 569.

Pharmaceutical Corporation v. *American Hospital Supply Corporation*, ... F. 2d ..... (7th Cir. 1976), the text of which is reproduced herein as App. 30-38, the Appeals Court for the Seventh Circuit held that a "stupid" step taken directly in the face of accepted practice within the art was evidence of non-obviousness. Similarly, the *Ortho* Court held the usual statutory presumption of validity to be *strengthened* "when the Patent Office specifically considered the prior art which is urged to invalidate the patent by an accused infringer". (*Ibid.*, at App. 36.) These holdings were upheld while specifically taking into consideration prior art attempts resulting in solutions close to that achieved by the inventor, but which, in point of fact, were *less* effective, *less* efficient and *more* difficult to use.

Petitioner submits that the *Ortho* decision is in direct conflict with the prior ruling appealed from here, which in essence ignored the findings of fact of the Trial Court with respect to the prior art and instead, asserted that the File Wrapper History patents, fully considered by the Patent Office and the Trial Court, taught Beith's invention, and that evidence of similar but unsuccessful solutions to the problem solved by Beith were indicative of the obviousness of the invention. Such reasoning is manifestly inconsistent with that of the *Ortho* Court. Petitioner submits that the reasoning adopted by the *Ortho* Court represents the more correct approach and should be adopted not only within the Seventh Circuit, but among the remaining circuits as well.

III. RESPONDENTS HAVE MISSTATED THE DUTY OF THE APPEALS COURT UNDER GRAHAM v. JOHN DEERE AND U. S. v. ADAMS.

Correct appellate review of the issue of obviousness requires a correct application of the *Graham* and *Adams* teachings. Respondents incorrectly assert that the Appeals Court "closely followed" these teachings.

Graham mandates a two-step analysis: determination of factual underpinnings and application of law to the facts. Effective appellate review must begin either with acceptance or rejection of the factual underpinnings as found by the trier of fact; rejection must not be subjective but must be based on a finding that determination of the factual underpinnings was clearly erroneous within the meaning of Rule 52(a) F. R. C. P. If the Appeals Court herein has followed the *Graham* mandate, it has done so *not* as an appellate tribunal, but as a *trial* court making its own independent findings of fact based on a review of the evidence, thence proceeding to apply the law to this newly conceived set of facts. The Appeals Court herein, while not overturning the Trial Court's findings of fact, in essence rejected them by holding that they were legal questions.

Adams teaches that "known disadvantages in old devices which would naturally discourage the search for new inventions may be taken into account in determining obviousness." (383 U. S. at 52.) To require, as the Appeals Court has done, that investigation in the face of such disadvantages be "purposeless," would serve to choke off inventive effort, and would seemingly force the inventor to flout not only the prior teachings and opinions of others, but the very laws of nature and science themselves before a valid patent could be granted. Such a heavy inventive burden was not contemplated by *Adams* and should not be countenanced by this Honorable Court.

Respondents assert that because Ansen had allegedly experimented with an approach similar to that adopted by Beith, such efforts illustrate that Beith's solution was not conceived in the face of long accepted factors deterring investigation of any such solution. It should be remembered that when *Adams* was first decided in the United States Court of Claims [330 F. 2d 622 (Ct. Cl. 1964)], it was pointed out at trial that one of the references cited by the alleged infringer taught a combination close to that of the Adams battery, but the cited combination *did not work*. Respondents claim that the Fujii Wheel and the

Ostgaard drawings establish Ansen's efforts to produce a universal mag wheel. The manifest unreliability of these exhibits was demonstrated at trial and noted by the Trial Court. Further, whatever Ansen eventually arrived at, it discarded and opted instead to produce the ill-fated adaptor plate system conception, eventually to be discarded *only* after Beith's solution proved to be a structural and financial success. At best, Ansen's efforts may be characterized as unsuccessful, which, in fact, discouraged Ansen from proceeding further. Such action is generally considered evidence of invention, rather than evidence against invention. In *Lyon* v. *Bausch & Lomb Optical Co.*, 224 F. 2d 530 (2nd Cir. 1955); *Illinois Tool Works* v. *Continental Can Co.*, 273 F. Supp. 94 (N. D. Ill. 1967), and in *U. S.* v. *Adams*, 383 U. S. 39 (1966), the infringing defendants rejected an approach similar to that of the patentee. Judge Learned Hand speaking for the *Lyon* court considered such unsuccessful prior attempts together with the fact that

> ". . . nothing in the implementary arts had been lacking to put the advance into operation . . ."

to hold:

> We do not see how any combination of evidence could more completely demonstrate that, simple as it was, the change had not been "obvious * * * to a person having ordinary skill in the art". *Lyon* v. *Bausch & Lomb, supra* at 535.

The very strength of the patent system rests with rewarding Beith's "brash" efforts in the face of known weaknesses or disadvantages to his approach; this strength will be eroded if Ansen is allowed to capitalize on Beith's efforts after abandoning its own.

Respondents mischaracterize the testimony of Petitioner's expert to label the Beith invention as "an ordinary design problem". The design parameters encountered by Beith delineated stylized, high-performance cast mag wheels requiring critical attention to appearance *and* performance, with the universality

needed to allow the wheels to fit cars with varying wheel bolt circle diameters. Respondents grossly over-simplify the problems occasioned by such parameters when Respondents infer that a solution to such problems involves *merely* selecting the quality of the material and the geometry of the structure. Between those two variables, one could fit the Wright Brothers' first airplane and the most recent and modern supersonic transport. The effectively twenty-twenty hindsight of Respondents and of the Appeals Court should not be allowed to obscure the very real significance of Beith's efforts to successfully produce a high-performance, highly styled cast mag wheel within very real and restrictive commercial and structural design parameters.

Respondents' footnoted reference to purchase of Petitioner by FDI overlooks the fact that subsequent to its purchase, FDI invested heavily in the Beith invention. At trial, such investment was in excess of 7 million dollars and it is clear that FDI's investment and purchase were grounded on the protection to be afforded by the *Beith* patent.[2] It was FDI's faith in the patent and in the patent system which motivated its monetary risk.

CONCLUSION.

Respondents have tacitly admitted existence of appellate inconsistency in reviewing the issue of non-obviousness by failing to respond to Petitioner's arguments. In addition, Respondents have closed their eyes to the Appeals Court's misapplication of the *Adams* and *Graham* teachings. Instead, Respondents would have this Honorable Court ratify a standard of review whereby an Appellate Court (1) redetermines facts found by the Trial Court without first holding such findings to be clearly erroneous; (2) uses such *"de novo"* findings to support a holding of obviousness; and (3) rules that such holding of obviousness will

2. Trial Record at p. 196; Finding of Fact No. 11.

persist unless the inventor's efforts were "purposeless" in view of the prior art. Petitioner respectfully submits that a more correct review procedure has been followed in other circuits, most recently in the Seventh Circuit, wherein lower court findings of fact remain undisturbed unless clearly erroneous, legal findings are upheld or rejected in view of such factual findings, and efforts taken directly *contra* to accepted practices are protected under *Adams,* rather than penalized. Such an appellate standard is consistent with accepted principles of justice and will serve to strengthen the patent system.

Respectfully submitted,

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In the

United States Court of Appeals

For the Seventh Circuit

No. 75-1859

ORTHO PHARMACEUTICAL CORPORATION, and
ORTHO DIAGNOSTICS, INC.,
Plaintiffs-Appellants,

v.

AMERICAN HOSPITAL SUPPLY CORPORATION, and
ROY E. SPECK,
Defendants-Appellees.

Appeal from the United States District Court
for the Southern District of Indiana, Indianapolis Division
No. IP 72 C 547
CALE J. HOLDER, *Judge.*

ARGUED FEBRUARY 13, 1976 — DECIDED APRIL 28, 1976

Before PELL, *Circuit Judge,* BAUER, *Circuit Judge,* and PERRY, *Senior District Judge.**

PERRY, *Senior District Judge.* After being accused of patent infringement, plaintiff-appellant Ortho Pharmaceutical Corporation [hereinafter "Ortho"] brought a declaratory judgment action against defendant-appellee American Hospital Supply Corporation [hereinafter "AHS"], as the exclusive licensee of claims 1 through 8 of United States Letters Patent 3,486,981 under an agreement with defendant-appellant Roy E. Speck, to whom the patent was issued on December 30, 1969, for "Substances Relating to

* Senior District Judge Joseph Sam Perry of the Northern District of Illinois is sitting by designation.

Testing of Blood-Coagulation." Under the agreement, AHS has the right to make, use and sell partial thromboplastin time test [hereinafter "PTT test"] reagents, which are substances used in blood-coagulation tests. In its complaint, filed March 3, 1972, Ortho asked the United States District Court *inter alia* to adjudge that Speck's patent was invalid and that the manufacture, sale and use of Ortho's Activated Thrombofax Reagent [hereinafter "Thrombofax"] had not infringed it. Because Ortho had brought the action in New Jersey and had not joined Speck as a co-defendant, AHS moved on August 1, 1972, to dismiss or in the alternative to transfer the action to the Southern District of Indiana. Twenty-eight days later, Ortho amended its complaint to restrict the matter in suit to claims 1 through 8 of Speck's patent.

Ruling upon AHS's motion, District Judge Clarkson S. Fisher,—in a commendably thorough opinion order,—found that Speck was an indispensable party to the action and that a declaratory judgment action could not be defended by the licensee alone. Instead of dismissing the action, however, Judge Fisher ordered it transferred to the Southern District of Indiana. There, in order to comply with an order of District Judge Cale J. Holder that Speck be made a party defendant, Ortho further amended its complaint to name Speck as a co-defendant. In September, AHS and Speck answered the second amended complaint and Speck filed a counterclaim against Ortho for patent infringement. Ortho answered the counterclaim the next month. Thereafter, extensive discovery was made by the litigants until February of 1975 when Ortho filed an amendment to its second amended complaint. In the amendment Ortho added an allegation that claims 1 through 8 are invalid under the provisions of both paragraph 1 and paragraph 2 of 35 U.S.C. §112. The case was then tried. At the trial, Ortho's declaratory judgment complaint was dismissed without prejudice and the case was tried on the issues raised by the counterclaim.

On June 30, 1975, District Judge Holder entered unreported but very thorough Findings of Fact and Conclusions of Law. On July 18, 1975, Ortho filed a confidential motion to add evidence excluded during the trial as evidence for purposes of appeal. On July 29, 1975, Judge Holder entered a judgment in which he adjudged *inter alia*

that claims 1, 2, 5, 6, 7 and 8 of Speck's patent are valid and that the counterdefendants, Ortho and Ortho Diagnostics, Inc. [hereinafter also "Ortho"][1], had infringed said claims. The same day, Judge Holder issued a writ of injunction enjoining said counter-defendants from making, using or selling Thrombofax in the United States during the life of Speck's patent.

On August 8th, Ortho appealed the judgment of July 29, 1975 and Judge Holder stayed the enforcement of the judgment pending appeal. On September 11th, Judge Holder denied Ortho's motion of July 18th (to add evidence excluded during the trial).

Ortho exhorts us to reverse the decision of the District Court and to find that the claims in suit are invalid and have not been infringed by Ortho's Thrombofax. Ortho says that we should do so because in many critical areas the District Court's findings of fact are "unbelievably erroneous". We assume that within the meaning of Rule 52(a), 28 U.S. Code, Ortho is using the term "unbelievably erroneous" as a synonym for "clearly erroneous".

Ortho contends that the evidence clearly establishes that the claims in suit are invalid under the provisions of 35 U.S.C. §103, 35 U.S.C. §102(f) and (g), and 35 U.S.C. §112.[2] The contested claims are 1, 2, and 5 through 8. They are as follows:

> 1. A partial thromboplastin time test reagent comprising a platelet substitute, and ellagic acid as the chemical activator.

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[1] Ortho Diagnostics, Inc., a plaintiff-appellant herein, is the successor to plaintiff-appellant Ortho Pharmaceutical Corporation. It is not clear from the record when plaintiff-appellant Ortho Diagnostics, Inc., became joined as a party. The first record document on which it appears as a party is the Findings of Fact and Conclusions of Law entered on June 30, 1975 by Judge Holder.

[2] 35 U.S.C. §103 provides:

§103. Conditions for patentability; non-obvious subject matter.

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made. (July 19, 1952, ch. 950, 66 Stat. 798.)

2. A partial thromboplastin time test reagent comprising a platelet substitute, and sodium ellagate as the chemical activator.

• • •

5. A partial thromboplastin time test reagent comprising a platelet substitute, and a monovalent salt of ellagic acid as the chemical activator.

6. A partial thromboplastin time test reagent comprising a platelet substitute, and an hydroxy-substituted aromatic compound as the chemical activator.

7. A partial thromboplastin time test reagent comprising a platelet substitute, and a salt of an hydroxy-substituted aromatic compound as the chemical activator.

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[2] (Continued)

35 U.S.C. §102(f) and (g) provides:

§102. Conditions for patentability; novelty and loss of right to patent.

A person shall be entitled to a patent unless -

• • •

(f) he did not himself invent the subject matter sought to be patented, or

(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other. (July 19, 1952, ch. 950, 66 Stat. 797.)

35 U.S.C. §112 provides:

§112. Specification.

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention. A claim may be written in independent or dependent form, and if in dependent form, it shall be construed to include all the limitations of the claim incorporated by reference into the dependent claim.

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. (July 19, 1952, ch. 950, 66 Stat. 798; July 24, 1965, Pub. L. 89-83, §9, 79 Stat. 261.)

8. A partial thromboplastin time test reagent comprising a platelet substitute, and a monovalent salt of an hydroxy-substituted aromatic compound as the chemical activator.

The claims in suit are invalid under 35 U.S.C. §103, says Ortho, because what Speck did was obvious to a person with ordinary skill in the blood-coagulation field. They are invalid under 35 U.S.C. §102(f) and (g), it is claimed, because Speck was not the first discoverer of the subject matter of the claims in suit in that Dr. Ratnoff conceived and reduced to practice a PTT test reagent before Speck even conceived of his idea. They are invalid under 35 U.S.C. §112, contends Ortho, because they do not distinctly claim an operative product in that none of claims 1, 2, or 5 contains any reference to ellagic acid or sodium ellagate prepared by any special method of the patent, and none of claims 6 through 8 contains any limitation with regard to any special method of preparing any of the broadly-claimed genus designated as "an hydroxy-substituted aromatic compound." Additionally, says Ortho, claims 6 through 8 are so broad that they encompass many inoperative chemical activators.

Validity of the Claims under 35 U.S.C. §103

The District Court found that the subject matter of each of claims 1, 2, and 5 through 8 was not obvious to a person of ordinary skill in the blood coagulation field either in March of 1964 when Speck first prepared a PTT reagent by dissolving ellagic acid in sodium hydroxide, or on March 15, 1965, when Speck filed his patent application. We have reviewed the record carefully and we feel that it contains sufficient evidence to warrant this finding.

One difficulty we have with accepting Ortho's prior art argument is that Ortho did not establish that Dr. Ratnoff's 1963 article, upon which Ortho depends for prior art, contained an enabling disclosure—a recital telling how to make and use the dilute solutions of ellagic acid in order to accelerate clotting. It is well settled that a publication must contain sufficient disclosure to enable a person of ordinary skill in the art to make and use the invention described in the patent before the patent will be invalidated by the prior art publication. See *Seymour* v. *Osborn*, 78 U.S. 516, 555 (1870). The unsuccessful attempts of

both Dr. Ratnoff and Ortho to prepare a PTT reagent containing ellagic acid in a true solution are further indications that Speck's claimed invention was not obvious even after Dr. Ratnoff's article was published. We agree with AHS that if Speck's invention was not obvious to a person of Dr. Ratnoff's eminent skill, it would not be obvious to a person of ordinary skill in the art.

Perhaps the most important weakness of Ortho's obviousness contention is that Speck made a startling discovery by doing what Dr. Huseby said was a stupid thing to do,—using sodium hydroxide to dissolve ellagic acid. By doing this, Speck discovered that ellagic acid, unlike any other material known to Dr. Huseby, will remain in solution at a pH of 7.5 if it is first dissolved in a base at a higher pH and the pH is then reduced to 7.5 by adding an acid. Both Dr. Colburn and Dr. Huseby agreed that if a material is insoluble at a certain pH but is soluble at a higher pH, and if the pH is raised to dissolve the material and then lowered, the material would precipitate out of solution. But this does not happen with ellagic acid. The PTT test must be performed within the physiological pH range of about 7.3 to 7.5. This was confirmed by Dr. Ratnoff, who testified that the clotting test will not work unless it is done somewhere between pH 7 and 8. Dr. Huseby testified that he would not have used sodium hydroxide to dissolve ellagic acid after reading the 1963 article of Dr. Ratnoff because of the pH at which the reagent had to function and because of the molecular structure of ellagic acid. Dr. Huseby went so far as to say that the idea of using sodium hydroxide to dissolve ellagic acid was "stupid" and that he was "horrified" to learn that Speck's licensee was dissolving ellagic acid in this manner until he learned that Speck's procedure actually worked. The trial judge had a right to credit Dr. Huseby's testimony, and Ortho's vigorous attack on Dr. Huseby's qualifications and on his testimony fails to persuade us that Dr. Huseby was not a credible witness and that the trial judge's findings based upon Dr. Huseby's testimony were clearly erroneous.

Secondary considerations, too, indicate that Speck's invention was not obvious. First, the commercial success of his invention is indicated by the fact that up to the date of the trial Speck received more than $75,000 in royalties.

Ortho concedes that reagents prepared in accordance with Speck's patent can be more conveniently used by untrained help and with instruments. (Reply Brief for Appellants at 1). The reason for this is that such reagents permit the PTT clotting times to be determined automatically by optical instruments. Second, that there was a long-felt but unsolved need for a PTT reagent with a soluble activator is indicated by problems with non-activated PTT tests and particle-activated tests, by Ortho's search since 1961 for a workable soluble activator and its subsequent switch to Speck's procedure after it analyzed his licensee's reagent. Third, the failure of others is indicated by Dr. Ratnoff's failure to solve his suspension problems and by Ortho's failure to solve suspension and precipitation problems until after it began using sodium hydroxide.

Moreover, the usual presumption of validity under 35 U.S.C. §282 is strengthened when the Patent Office specifically considered the prior art which is urged to invalidate the patent by an accused infringer. *Shumaker* v. *Gem Mfg. Co.*, 311 F.2d 273, 275 (7th Cir. 1962); *AMP, Inc.* v. *Vaco Products Co.*, 280 F. 2d 518, 521 (7th Cir. 1960). Speck himself referred to Dr. Ratnoff's 1964 publication in column 4 of his patent and this publication was used as reference by the Patent Office and was listed among the references at the end of the patent. Dr. Ratnoff's 1963 article is an abstract of his 1964 publication. The 1963 article is therefore no more pertinent than the 1964 publication. Ortho relies on the Merck Index for the statement that ellagic acid is soluble in alkalies, but the Patent Office cited the Jurd reference for the statement that ellagic acid is soluble in sodium hydroxide. We feel that there is ample support for the trial judge's finding that none of the prior art relied on by Ortho is any more pertinent than the prior art which the Patent Office considered before granting the patent.

Validity of the Claims under 35 U.S.C. §102(f) and (g)

We also cannot accept Ortho's contention that Dr. Ratnoff rather than Speck was the first discoverer of the subject matter of the claims in suit. Experiments by both Speck and Wilbourn established that Dr. Ratnoff had, not a true solution of dissolved ellagic acid, but merely a suspension of undissolved ellagic acid particles. The record

as a whole supports the District Court's finding that any activation of the Hageman factor obtained by Dr. Ratnoff's reagent was caused by these undissolved particles of ellagic acid. In contrast to what Dr. Ratnoff did, Speck prepared a reagent in which the ellagic acid was in true solution.

Ortho also argues that regardless of whether the ellagic acid in Dr. Ratnoff's reagent was a true solution or only a suspension of undissolved particles, the ellagic acid nonetheless acted as a chemical activator as those words are used in the claims. The District Court found, however, that the words "chemical activator" as used in Speck's claims refer to an activator in solution as distinguished from insoluble activators. We agree with the appellees that the meaning of these words must be determined with reference to the specification as a whole when read by a person skilled in the art to which the patent pertains, the reason being that the specification of the patent is addressed to such persons. See *Carnegie Steel Co.* v. *Cambria Iron Co.*, 18 U.S. 403, 407 (1902). We think that Dr. Murray's testimony amply supports this finding of the District Court.

Validity of the Claims under 35 U.S.C. §112

Nor can we accept Ortho's contention that the claims in suit are invalid under 35 U.S.C. §112. Ortho's argument that claims 1, 2 and 5 do not cover any operative product is countered by Speck's testimony, when taken as a whole, and by that of Dr. Murray.

Ortho argues that claims 6 through 8 are so broad that they embrace many inoperative chemical activators, but Ortho has failed to prove that any hydroxy-substituted aromatic compounds would be inoperative in a PTT reagent prepared in accordance with Speck's patent. Further, we are persuaded that Speck is not claiming hydroxy-substituted aromatic compounds *per se*, but is claiming a PTT reagent which includes only those hydroxy-substituted aromatic compounds which function as a chemical activator of the Hageman factor. See *Application of Fuetterer*, 319 F.2d 259 (C.C.P.A. 1963), where the Patent Office rejected a claim which included "an inorganic salt" as an ingredient on the ground that not all such salts

could perform the function described in the claim. The court reversed, stating that the applicant had described and claimed his invention as comprehending the use of inorganic salts which were capable of performing a specific function and that the claims would be limited accordingly. Finally in this connection, this court has said that the claims of a patentee should be interpreted liberally so as to uphold and not destroy his right in the substance of his invention. *Reese* v. *Elkhart Welding and Boiler Works, Inc.*, 447 F.2d 517, 525 (7th Cir. 1971).

Infringement

Ortho finally contends that the District Court erred in finding that all the claims in suit were infringed by Ortho. The testimony of Wilbourn, Speck and Dr. Huseby, pertinent responses to requests for admission, evidence of Ortho's manufacturing procedures and reagents prepared by Speck in accordance therewith, supply sufficient support for the court's finding of infringement.

Ortho's Confidential Motion

The District Court did not err in denying Ortho's confidential motion to add evidence excluded during the trial. Ortho contends that the excluded evidence would have damaged Dr. Huseby's credibility, but it is well settled that even newly-discovered evidence—which is not the case here—generally cannot be the basis for a new trial when such evidence is strictly impeaching in nature. See *Wroblewski* v. *Exchange Insurance Assn. of Chicago*, 273 F.2d 158, 162 (7th Cir. 1959).

For all of the foregoing reasons, the judgment of the District Court is Affirmed.

A true Copy:

Teste:

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Clerk of the United States Court of Appeals for the Seventh Circuit

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